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October 21, 2004

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

ET Docket No: 04-374
DA 04-3039

Dear Ms. Dortch:

The Texas Transportation Institute (TTI) of Texas A&M University supports Wavebounce, Inc.'s request for a waiver of part 15 of the Commission UWB rules. TTI is the largest transportation research organization in the United States. We are currently conducting research for several federal agencies; numerous DOT's around the US and a number of private sponsors. TTI has been conducting research with non-contact Ground Penetrating Radar systems since 1988. For the past 5 years, we have been working with the 1 GHz non-contact GPR systems provided by Wavebounce, Inc. of Houston, Texas. TTI's role in the implementation of this technology has been to evaluate research applications, to develop data collection and processing software and to provide training for our sponsors.

Our main sponsor the Texas Department of Transportation (TxDOT) has been using GPR on a daily basis since the mid 1990's. We have collected GPR data on over 5000 miles of Texas highways. Our systems are mounted on a fiberglass boom 5 feet in front of the test vehicle and the GPR energy is directed into the highway. Our vehicles are equipped with both cellular phones and Global Positioning Systems and we have never detected any problems with these devices. While working with TxDOT, we have documented how this technology has saved million's of dollars in identifying the optimal repair strategy for Texas highways. We have also used GPR to avoid major disasters. For example, it was used to detect a washout beneath IH 35 in Austin Texas. That section of highway was closed and later collapsed under it own weight. Collapsing under traffic would likely have caused multiple deaths.

The Wavebounce systems are operated by trained operators at highways speed. This has many safety advantages to our operators and to the traveling public. There are no replacements for this technology. The 1 GHz units provide us with a depth of penetration of around 2 feet, which is ideal for pavement engineering applications. We currently operate 6 units in Texas and would like to eventually increase our fleet to around 15 units.

The Texas Transportation Institute support Wavebounce's application to produce a limited number of these systems. We feel GPR technology is critical in meeting our goal of providing safe, economic highways for the citizens of Texas

Sincerely,

A handwritten signature in cursive script that reads "Herb Richardson". The signature is written in dark ink and is positioned above the printed name of the signatory.

Herbert H. Richardson
Director